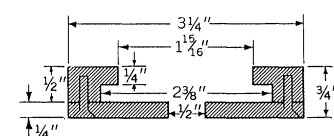
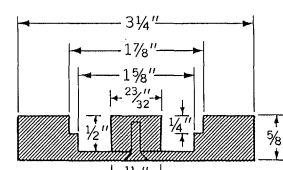
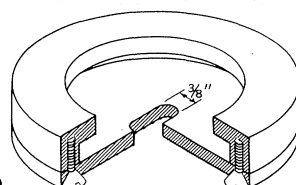


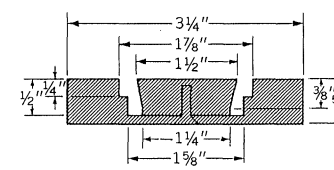
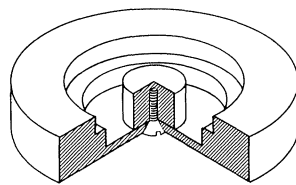
DETAIL B  
Cover plate mold



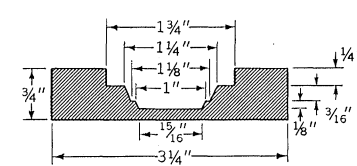
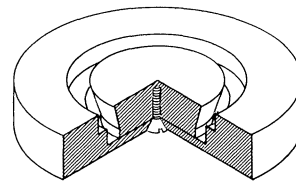
DETAIL C  
Cover mold (two-piece aluminum)



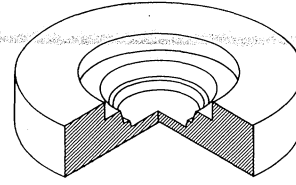
DETAIL D  
Smith crucible adapter mold  
(two-piece aluminum)



DETAIL E  
25-ml crucible adapter mold  
(two-piece aluminum)



DETAIL F  
Centering stool mold  
(one-piece aluminum)



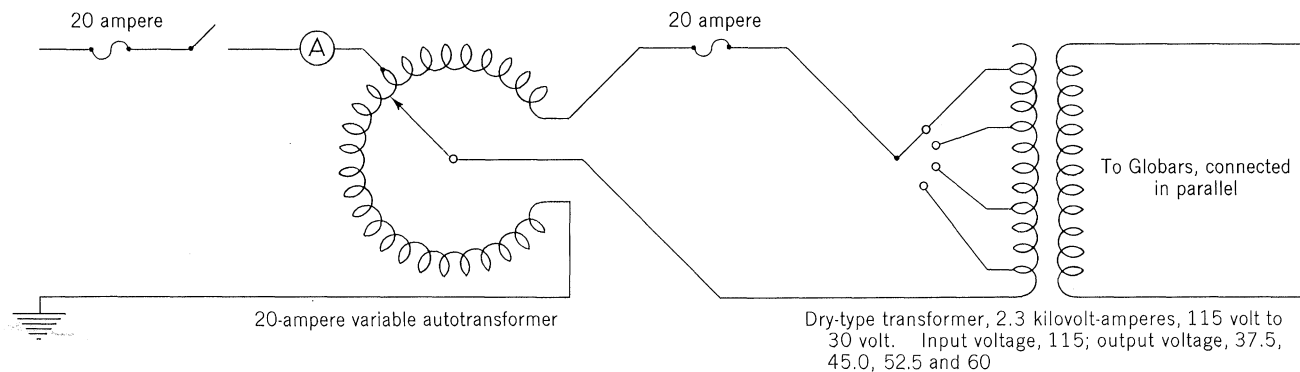
## CERAMIC PARTS MOLDING PROCEDURE

Mold ceramic parts from fire clay (Scorifier Mix, Denver Fire Clay Co., Denver, Colo.). Wet clay and knead to a doughy consistency, grease inside of mold, fill mold with fire clay and tamp firmly in place. If mold has a center core, this core must be removed at once. Let the part air dry, then fire to 1200°C. All parts must be molded from same lot of fire clay, otherwise shrinkage will be uneven and parts will not fit each other. Before firing the part (after it is air dried), test to see if parts fit each other. If holes in some parts are too small, remold using mix containing less water

## SPECIAL PARTS LIST

Part	Description and manufacturer	Quantity required	Part	Description and manufacturer	Quantity required
A	No. 1 unglazed porcelain crucible, cut down to $\frac{3}{8}$ inch. Coors Porcelain Co., Denver, Colo.	4	E	Pt-Pt 13-percent RH thermocouple with suitable insulators. Any chemical supply manufacturer.	1
B	Type AT 12 x 5 x $\frac{3}{8}$ -inch Globar (set of 4 must have matched resistance).	4	F	Ceramic thermocouple shield, $\frac{3}{8}$ inch outside diameter, $\frac{1}{4}$ inch inside diameter, 4 inches long.	1
C	No. 2131 $\frac{3}{8}$ -inch terminal clamp (fasten on with No. 2144 expanding tool). Carborundum Co., Niagara Falls, N. Y.	8	G	Fire clay centering stool (cemented to floor of heating chamber). Cast in mold shown at right by furnace fabricator.	4
D	No. 2056 16-inch flexible terminal strap. Carborundum Co., Niagara Falls, N. Y.	4			

DETAIL G  
Wiring diagram



## DETAILS OF GLOBAL FURNACE

Perspective drawing by Fred Hostetler